ChatGPT in education: a discourse analysis of worries and concerns on social media

Abstract

The rapid advancements in generative AI models present new opportunities in the education sector. However, it is imperative to acknowledge and address the potential risks and concerns that may arise with their use. We analyzed Twitter data to identify critical concerns related to the use of ChatGPT in education. We employed BERT-based topic modeling to conduct a discourse analysis and social network analysis to identify influential users in the conversation. While Twitter users generally expressed a positive attitude toward using ChatGPT, their concerns converged into five categories: academic integrity, impact on learning outcomes and skill development, limitation of capabilities, policy and social concerns, and workforce challenges. We also found that users from the tech, education, and media fields were often implicated in the conversation, while education and tech individual users led the discussion of concerns. Based on these findings, the study provides several implications for policymakers, tech companies and individuals, educators, and media agencies. In summary, our study underscores the importance of responsible and ethical use of AI in education and highlights the need for collaboration among stakeholders to regulate AI policy.